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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,469	12/29/2000	Frank J. Weisser JR.	BE1-0003US	7167
49584	7590	05/19/2005	EXAMINER	
LEE & HAYES, PLLC 421 W. RIVERSIDE AVE. SUITE 500 SPOKANE, WA 99201			CHANG, JUNGWON	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,469

Applicant(s)

WEISSER ET AL.

Examiner

Jungwon Chang

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**FIANL ACTION**

1. Claims 24-61 are presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 41-45, 48-52 and 55-59 are rejected under 35 U.S.C. 102(e) as being anticipated by Skog et al. (US 6,385,650), hereinafter Skog.
4. As to claims 41 and 48, Skog discloses the invention as claimed, including a method for relating network components (20, fig. 1; col. 6, lines 10-18) with a customer (i.e., subscriber) (col. 6, lines 44-49), the step comprising:  
  
creating an objected-oriented module (i.e., object oriented system; col. 5, lines 63-66) of network components from network component data (i.e., hardware elements, 21-24, fig. 1) arranged in a form that can be manipulated using an object-oriented application (col. 7, lines 27-38), wherein the model includes a plurality of sub-tree

Art Unit: 2154

layers, wherein each layer (i.e., sub-trees, col. 1, lines 16-17 and 32-33; col. 4, lines 9-19), wherein each layer represents a layer of abstraction (i.e., route, trunk, line interface, fig. 4), wherein a root (i.e., root; col. 1, lines 16-17; col. 9, lines 31-32) represents the highest sub-tree layer (fig. 4; col. 7, lines 8-10) and the highest level of abstraction (i.e., ISDN, fig. 4); and

assigning a customer identifier (i.e., unique subscriber name; subscriber 1234567, 41, fig. 4; subscriber 1235555, 42, fig. 4; col. 2, lines 2-4 and 31-34; col. 7, lines 5-7) at a lowest abstraction layer to a network elements that relate the customer to certain network element (i.e., connecting the subscriber identifiers (i.e., subscriber names) to the network element (i.e., line, 11, 12, fig. 4; col. 6, lines 44-48).

5. As to claim 55, it is rejected for the same reasons set forth in claims 41 and 48 above. In addition, Skog discloses a computer-readable medium (i.e., memory, storage) having stored thereon instructions (i.e., algorithms) which, when executed by a processor (i.e., computer) (col. 3, lines 44-58 and 61-66; col. 4, lines 38-44; col. 5, lines 14-20).

6. As to claims 42, 43 and 45, Skog discloses gathering network element data (i.e., collection of network element data, i.e., hardware elements, 21-24, fig. 1; col. 7, lines 21-26); arranging the network element data in a form that can be manipulated using an object-oriented application (col. 7, lines 27-38); and gathering customer data (col. 6, lines 44-45; col. 1, lines 52-55).

7. As to claim 44, Skog discloses assigning the unique customer identifier to the network element at a lowest abstraction layer (i.e., sending the unique customer identifier (30, fig. 1; 41, 42, fig. 4) to make a connection to the lowest abstraction layer (i.e., lic, 23, fig. 1; 55, fig. 4; col. 6, lines 16-18).
8. As to claims 49, 50, 52, 56, 57, 59, they are rejected for the same reasons set forth in claims 42, 43 and 45 above.
9. As to claims 51 and 58, they are rejected for the same reasons set forth in claim 44 above.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 24-40, 46, 47, 53, 54, 60 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skog et al. (US 6,385,650), hereinafter Skog, in view of Taylor (US 6,507,565).

12. As to claims 24 and 33, Skog discloses the invention substantially as claimed including an object-oriented system (i.e., object oriented system; col. 5, lines 63-66) for one of relating network elements (20, fig. 1; col. 6, lines 10-18) to a customer (i.e., subscriber) (col. 6, lines 44-49) and relating a customer to the network elements (col. 6, lines 44-49), the system comprising:

the network element data module (i.e., 43, 44, 48-55, fig. 4) and the customer data module (41, 42, fig. 4; col. 6, lines 44-45; col. 1, lines 52-55) to create an object-oriented model of the network components (fig. 4; col. 5, lines 63-66; col. 6, line 63 – col. 7, line 10); wherein the network component data module (20, fig. 1; 20A, fig. 6; col. 6, lines 10-18) contains network component data (i.e., hardware elements, 21-24, fig. 1) arranged in a form that can be manipulated using an object-oriented application (col. 7, lines 27-38); and

at least one output of the module, the at least one output comprising:

a plurality of sub-tree layers (i.e., sub-trees, col. 1, lines 16-17 and 32-33; col. 4, lines 9-19), wherein each layer represents a layer of abstraction (i.e., route, trunk, line interface, fig. 4), wherein a root (i.e., root; col. 1, lines 16-17; col. 9, lines 31-32) represents the highest sub-tree layer (fig. 4; col. 7, lines 8-10) and the highest level of abstraction (i.e., ISDN, fig. 4); and

a plurality of unique customer identifiers (i.e., unique subscriber name; subscriber 1234567, 41, fig. 4; subscriber 1235555, 42, fig. 4; col. 2, lines 2-4 and 31-34; col. 7, lines 5-7) assigned to network components that relate the customer to certain network component (i.e., connecting the subscriber identifiers (i.e., subscriber names) to the

network component (fig. 4; col. 6, lines 44-48).

Skog discloses connecting (assigning) the subscriber identifiers (i.e., subscriber names) to the network component (fig. 4; col. 6, lines 44-48). However, Skog does not specifically disclose mapping module. Taylor discloses a mapping module (12, fig. 1; col. 2, lines 53-58; col. 2, line 66 – col. 3, line 8; col. 3, lines 28-32; col. 4, lines 59-66; col. 5, lines 10-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Skog and Taylor because Taylor's mapping module would improve the reliability of Skog's system by allowing a network management system to aware of what type of network components are connected to whom.

13. As to claims 25-26, Skog discloses the network component data module (20, fig. 1; 20A, fig. 6; col. 6, lines 10-18) and the customer data module (41, 42, fig. 4; col. 6, lines 44-45; col. 1, lines 52-55; col. 1, lines 9-17; col. 3, lines 27-35 and 40-58).

14. As to claims 27-29, Skog discloses assigning the unique customer identifier to the network component at a lowest abstraction layer (i.e., sending the unique customer identifier (30, fig. 1; 41, 42, fig. 4) to make a connection to the lowest abstraction layer (i.e., lic, 23, fig. 1; 55, fig. 4; col. 6, lines 16-18).

15. As to claim 30, Skog discloses assigning the unique customer identifier to the

network element at a second lowest abstraction layer when all of the network elements in the lowest abstraction layer provide service to the same customer (i.e., sending the unique customer identifier (30, fig. 1; 41, 42, fig. 4) to make a connection to the second lowest abstraction layer (i.e., trunk, fig. 1; 50, fig. 4) via the lowest abstraction layer (i.e., 23, fig. 1; 55, fig. 4) (col. 6, lines 48-61).

16. As to claim 31, Skog discloses a service management sub-tree layer wherein each supported service has a set of instances corresponding to the network components that provide the service (i.e., all the network element (i.e., managed object) are given an instance name upon creation; col. 2, lines 24-34; col. 6, lines 63-65).

17. As to claim 32, Skog discloses the unique identifier comprises a predetermined character string, and wherein each string having a series of substrings, and wherein each substring corresponds to a network component having a relationship with the customer (i.e., all the network element (i.e., managed object) are given an instance name upon creation and every network element has a distinguished name, wherein the name is unique; col. 2, lines 24-34; col. 6, lines 63-65).

18. As to claims 34-35, they are rejected for the same reasons set forth in claims 25-26 above.

19. As to claims 36-38, they are rejected for the same reasons set forth in claims 27-



Art Unit: 2154

29 above.

20. As to claim 39, it is rejected for the same reasons set forth in claim 30 above.

21. As to claim 40, it is rejected for the same reasons set forth in claim 31 above.

22. As to claims 46 and 47, Skog discloses manipulating the network components (col. 7, lines 27-38; when the network components are manipulated, i.e., updated, changed the status of the network components, the customer who receives a service from the network component needs to configure its updated network components are well known). However, Skog does not specifically disclose updating the relationship between the network elements and the customer identifiers in accordance with the assigning step. Taylor discloses updating the relationship between the network components and the customer identifiers in accordance with the assigning step (col. 3, line 57 – col. 4, line 1; col. 4, lines 23-36; col. 6, lines 25-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Skog and Taylor because Taylor's updating the relationship between the network components and the customer identifiers would improve the occurrence of status changing in the network elements relating to the customer.

23. As to claims 53-54 and 60-61, they are rejected for the same reasons set forth in claims 46-47 above.

24. Applicant's arguments filed 12/29/2004 have been fully considered but they are not persuasive.

25. In the remarks, the applicant argued in substance that:

(1) Applicant submits that Skog and Taylor do not teach or suggest a mapping module.

26. Examiner respectfully traverses applicant's remarks:

As to point (1), Skog discloses connecting (assigning) the subscriber identifiers (i.e., subscriber names) to the network component (fig. 4; col. 6, lines 44-48). However, Skog does not specifically disclose a mapping module. Taylor discloses a mapping module (12, fig. 1; col. 2, lines 53-58; col. 2, line 66 – col. 3, line 8; col. 3, lines 28-32; col. 4, lines 59-66; col. 5, lines 10-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Skog and Taylor because Taylor's mapping module would improve the reliability of Skog's system by allowing a network management system to aware of what type of network components are connected to whom.

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 2154

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is (703)305-9669. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWC

*Wen-Jian L.*  
5/16/05